



## Final Regulation Agency Background Document

<b>Agency name</b>	Department of Environmental Quality
<b>Virginia Administrative Code (VAC) citation</b>	9VAC15-60
<b>Regulation title</b>	Small Renewable Energy Projects (Solar) Permit by Rule
<b>Action title</b>	Establishment of one or more permits by rule necessary for the construction and operation of small renewable energy projects mandated by the Virginia 2009 Acts of Assembly Chapters 808 and 854 (HB 2175/SB 1347). Specifically, this regulatory action focuses on solar energy projects
<b>Date this document prepared</b>	April 3, 2012

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 14 (2010) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

### Brief summary

*Please provide a brief summary (no more than 2 short paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Also, please include a brief description of changes to the regulation from publication of the proposed regulation to the final regulation.*

The purpose of this regulatory action is to implement 2009 state legislation requiring the Department of Environmental Quality (DEQ) to develop one or more permits by rule for solar energy projects with rated capacity not exceeding 100 megawatts. The "permit by rule" establishes requirements for potential environmental impacts analyses, mitigation plans, facility site planning, public participation, permit fees, inter-agency consultations, compliance and enforcement. This final regulation constitutes DEQ's permit by rule for solar energy projects. Changes from the proposed include clarification of certain definitions, citations, applicability, and procedure; addition of refinements to the scope of the "de minimis" provision; and movement of a basic desktop survey of known historic resources and of T&E species from regulation to future agency guidance for projects covered by the "de minimis" provision.

**Statement of final agency action**

*Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency or board taking the action, and (3) the title of the regulation.*

Based on the draft final Solar PBR, TH02, TH03, the deliberations of the Solar RAP (memorialized in meeting notes of the four day-long RAP meetings), comments submitted by members of the public during the public comment period, and technical corrections submitted by DEQ staff, the Director adopted the Small Renewable Energy Projects (Solar) Permit by Rule Regulation, 9VAC15-60 on April 3, 2012.

**Legal basis**

*Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable, and (2) promulgating entity, i.e., agency, board, or person. The identification should include a reference to the agency/board/person’s overall regulatory authority, as well as a specific provision authorizing the promulgating entity to regulate this specific subject or program; and a description of the extent to which the authority is mandatory or discretionary.*

This regulatory action is undertaken by the Department of Environmental Quality pursuant to Code of Virginia Sections 10.1-1197.5 through 10.1-1197.11, 2009 Acts of Assembly Chapters 808 and 854. The legislation mandates that DEQ develop one or more permits by rule for small renewable energy projects.

**Purpose**

*Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail the specific reasons it is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.*

This regulatory action is necessary in order for DEQ to carry out the requirements of 2009 Acts of Assembly Chapters 808 and 854 (hereafter “2009 statute”). The regulatory action is essential to protect the health, safety, and welfare of Virginia citizens because it will establish necessary requirements, other than those established in applicable environmental permits, to protect Virginia’s natural resources that may be affected by the construction and operation of small renewable energy projects.

**Substance**

*Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the “All changes made in this regulatory action” section.*

This regulatory action addresses the need for a reasonable degree of certainty and timeliness in the natural-resources protections required for small solar energy projects by setting forth, as fully as practicable, these required protections “up front” in this new permit by rule for solar energy projects. The regulatory action describes how the Department will address analysis of potential environmental impacts, mitigation plans, facility site planning, public participation, permit fees, inter-agency consultations, compliance, and enforcement.

**Issues**

- Please identify the issues associated with the proposed regulatory action, including:*
- 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions;*
  - 2) the primary advantages and disadvantages to the agency or the Commonwealth; and*
  - 3) other pertinent matters of interest to the regulated community, government officials, and the public.*

*If the regulatory action poses no disadvantages to the public or the Commonwealth, please indicate.*

The primary advantages of the regulation to the public include the following:

For any individual or company wishing to develop a small solar energy project, the regulation provides certain, consistent and, DEQ believes, reasonable standards for obtaining a permit to construct and operate. Furthermore, the regulation mandates that DEQ process permit applications in no more than 90 days – a timeframe that should help developers in their planning. Provision of certain and timely regulatory requirements should assist developers in obtaining project financing.

For individuals or companies wishing to develop very small projects (e.g., 5 MW and below) or projects falling into certain categories (e.g., mounted on buildings or parking lots), the proposed § 9VAC15-60-130 allows the applicant to perform a greatly reduced number of regulatory requirements. This provision should make it less costly to develop residential-scale and community-scale projects.

Another advantage -- to the regulated community, government officials, and the public -- is that this regulation creates a clear and, DEQ believes, an efficient path for development of solar energy in Virginia. Avoiding additional electrical generation from fossil fuels is a benefit for the environment, because renewable energy projects do not emit greenhouse gases or other air pollutants. Developing and expanding new, environmentally-friendly industry in Virginia is also a boost for our economy, and a significant step in creating energy independence from foreign oil interests.

Of interest is the agreement of the regulatory advisory panel (RAP) – a group comprised of representatives from environmental advocacy groups, industry, local government, academia, industry, and state agencies – on all issues presented in the regulation. In a number of states, interested parties and government agencies are debating what natural-resource protections are appropriate for solar energy projects. RAP members who have experience with such projects and regulations across the country expressed the view that Virginia’s proposed solar permit by rule is fair, balanced, and appropriately protective of natural resources, while not over-burdening

business interests. The fact that the RAP was able to agree on all issues was a significant milestone in creating a constructive and productive process for approving proposed solar energy projects in Virginia.

The regulation poses no known disadvantages to the public or the Commonwealth.

**Changes made since the proposed stage**

*Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar’s office, please put an asterisk next to any substantive changes.*

Section number	Requirement at proposed stage	What has changed	Rationale for change
10	Definitions.	Definition of “Small solar energy project” (first sentence): "Small solar energy project," "solar energy project," or "project" means a small renewable energy project that (i) generates electricity from sunlight, <del>whose main purpose is to supply electricity,</del> consisting of one or more PV systems and other appurtenant structures and facilities within the boundaries of the site; and (ii) is designed for, or capable of, operation at a rated capacity equal to or less than 100 megawatts.	The phrase, “whose main purpose is to supply electricity,” was removed to avoid potential confusion concerning projects that produce electricity but are also serve demonstration, experimental or research purpose. These projects are covered by the PBR. One commenter found the phrase redundant.
10	Definitions.	Definition of “Small solar energy project” (second sentence): Two or more solar energy projects otherwise spatially separated but under common ownership or operational control, which, <del>if connected to the electrical grid,</del> are connected to the electrical grid under a single interconnection agreement, shall be considered a single solar energy project.	The phrase “if connected to the electrical grid” was also removed from this definition. The 2009 statute includes two provisions requiring PBR applicants to provide interconnection studies and interconnection agreements; however, not all projects will sell electricity at wholesale back to the grid. The legal question of whether such interconnection to the grid is jurisdictional (i.e., is necessary for DEQ to have regulatory authority over the project) is still being analyzed by the Office of the Attorney General (OAG). Therefore, the proposed regulation will be modified so that it is silent on this question, consistent with the Wind PBR regulation and the proposed

<p>20</p>	<p>Authority and applicability.</p>	<p>Applicability: The regulation contains requirements for solar-powered electric generation projects consisting of PV systems and associated facilities with <del>either no connection to the electrical grid</del> or a single interconnection to the electrical grid, that are designed for, or capable of, operation at a rated capacity equal to or less than 100 megawatts.</p>	<p>Combustion PBR regulation. Agency Guidance will provide the public with the legal resolution of this issue, when such becomes available.</p> <p>The phrase, "either no connection to the electrical grid or," was removed from subparagraph A for the reasons stated above.</p>
<p>30</p>	<p>Application for permit by rule for solar energy projects with rated capacity greater than 5 megawatts and disturbance zone greater than 10 acres.</p>	<p>Applicability: 3. In accordance with § 10.1-1197.6 B 3 of the Code of Virginia, furnishes to the department copies of all interconnection studies undertaken by the regional transmission organization or transmission owner, or both, on behalf of the small renewable energy project, <del>if the project will be connected to the electrical grid;</del> 4. In accordance with § 10.1-1197.6 B 4 of the Code of Virginia, furnishes to the department a copy of the final interconnection agreement, <del>if any</del>, between the small renewable energy project and the regional transmission organization or transmission owner indicating that the connection of the small renewable energy project will not cause a reliability problem for the system. Citations for DCR Documents B. 3. The Natural Communities of Virginia, Classification of Ecological Community Groups, <del>Second Approximation, Version 2.3</del>, Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA. Available at the following Internet address: <a href="http://www.dcr.virginia.gov/natural_heritage/nintro.shtml">http://www.dcr.virginia.gov/natural_heritage/nintro.shtml</a>.</p>	<p>The phrase, "if the project will be connected to the electrical grid," was removed from subparagraph A 3 and "if any" was removed from subparagraph A 4 for the reasons stated above.</p>
<p>120</p>	<p>Internet accessible resources.</p>	<p>C. 2. <u>Virginia</u> Natural Landscape Assessment, <del>2010</del>, Virginia Department of Conservation and Recreation. Available at the following Internet address: for detailed information on ecological cores go to <a href="http://www.dcr.virginia.gov/natural_heritage/vclnavnla.shtm">http://www.dcr.virginia.gov/natural_heritage/vclnavnla.shtm</a>. Land maps may be viewed at DCR's Land Conservation Data Explorer Geographic Information System website at <a href="http://www.vaconservedlands.org/gis.aspx">http://www.vaconservedlands.org/gis.aspx</a>.</p>	<p>The citations were amended due to the fact that DCR has issued newer versions of these documents. DCR recommended that the suggested revisions will direct users to the most current version and avoid DEQ's having to amend this regulation when new versions of the documents are developed.</p>

<p>*130</p>	<p>Small solar energy projects less than or equal to five megawatts or less than or equal to 10 acres or meeting certain categorical criteria.</p>	<p>Additional conditions under which a project can qualify for the “de minimis” requirements of this section:                  b. The small solar energy project is mounted on one or more building(s) less than 50 years old <u>or, if 50 years of age or older, have been evaluated and determined by DHR within the preceding seven (7) years to be not VLR-eligible.</u>                  c. The small solar energy project is mounted over one or more existing parking lots, <u>existing roads, or other previously disturbed areas and any impacts to undisturbed areas do not exceed an additional two (2) acres.</u>                  d. The small solar energy project utilizes integrated PV only, provided that the building or structure on which the integrated PV materials are used is less than 50 years old <u>or, if 50 years of age or older, have been evaluated and determined by DHR within the preceding seven (7) years to be not VLR-eligible.</u></p>	<p>The phrase, “or, if 50 years of age or older, have been evaluated and determined by DHR within the preceding seven (7) years to be not VLR-eligible,” was added to A 2 b and d. The phrase, “existing roads, or other previously disturbed areas and any impacts to undisturbed areas do not exceed an additional two (2) acres,” was added to A 2 c. These further refinements to the categorical criteria under which a project may qualify for the reduced requirements of section 130 (“de minimis” provisions) were developed by representatives from DHR and DGIF and recommended by unanimous consensus of the Combustion RAP, which was convened after the Solar RAP completed its work. Since the phrases are similarly applicable to solar projects, DEQ staff added and adapted, where appropriate, these refinements to the equivalent provisions of the proposed Solar PBR. DHR and DGIF staff agreed with this modification, and the change was also supported by public comment.</p>
<p>130</p>	<p>Small solar energy projects less than or equal to five megawatts or less than or equal to 10 acres or meeting certain categorical criteria.</p>	<p>Clarification of notice and certification requirements:                  B. The owner or operator of a small solar energy project with either a rated capacity greater than 500 kilowatts and less than or equal to five (5) megawatts, or a disturbance zone greater than two (2) acres and less than or equal to 10 acres, shall notify the department <u>by submitting and shall submit</u> a certification by the governing body of the locality or localities wherein the project will be located that the project complies with all applicable land use ordinances.</p> <p>Removal of requirement to perform desktop “fatal flaw” analysis and report results to local government:                  B. (second sentence)  <del>In addition, the owner or operator of such small solar energy project shall certify in</del></p>	<p>Staff made an editorial correction to subparagraph B to clarify that the applicant’s obligation to notify DEQ and its obligation to submit certification by the local government of land-use compliance are two separate obligations.</p>

<p>*130</p> <p>Documents Incorporated by Reference</p>	<p>Small solar energy projects less than or equal to five megawatts or less than or equal to 10 acres or meeting certain categorical criteria.</p> <p>(9VAC15-60)</p>	<p><del>writing to the department that he has (i) performed a desktop survey of known VLR-listed and VLR-eligible historic resources within the project's disturbance zone and within one-half (1/2) mile of the disturbance zone boundary by means of an archives search of DHR's cultural resource inventory; (ii) performed a desktop survey of T&amp;E species within the project's disturbance zone by obtaining a wildlife report and map generated from DGIF's Virginia Fish and Wildlife Information Service web-based application (9VAC15-60-120 C 3) or from a data and mapping system including the most recent data available from DGIF's subscriber-based Wildlife Environmental Review Map Service; and (iii) reported in writing the results of the archives search of known historic resources and desktop survey of T&amp;E species to the governing body of the locality or localities wherein the project will be located.</del></p> <p>Citations Deleted:  <del>The Natural Communities of Virginia, Classification of Ecological Community Groups, Second Approximation (Version 2.3) 2010, Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, Virginia.</del></p> <p><del>Virginia's Comprehensive Wildlife Conservation Strategy, 2005, Virginia Department of Game and Inland Fisheries, Richmond, Virginia.</del></p>	<p>Based on several public comments, this provision will be moved out of the regulation and placed in agency guidance. Because of concerns expressed by local-government representatives, the requirement that the results of the analyses be reported to local government will be removed. Instead, agency Guidance will suggest that applicants discuss the analyses with representatives of DHR and DGIF.</p> <p>The citation was removed by DEQ staff to reflect the fact that the Solar PBR regulation does not mandate the particularities of using these documents the way the Wind PBR regulation does. Whereas it was necessary to include these documents in DIBR for Wind, it is sufficient for Solar to include the references only in the Internet Resources section, 9VAC15-60-120.</p>
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**Public comment**

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.

Commenter	Comment by Category	Agency response
<p>Larry Land, Virginia Association of Counties (VACO); Donna Wirick, ReCAST; Pam Faggert, Dominion Resources Services, Inc. (Dominion)</p>	<p><b>Desktop “fatal flaw” analysis:</b>                      For projects with rated capacity &gt;500 kW to 5 MW, provision 9VAC15-60-130 B requires an applicant to perform a desktop archives search of known historic resources and a desktop search of T&amp;E species and report results to the local government where the project will be located. Commenters noted that it is unclear how local governments would deal with these results. The provision creates uncertainty as to who would be responsible for review and potential mitigation, if any. The provision is inconsistent with the Wind PBR and the proposed Combustion PBR, and it is stricter than the SCC’s total exemption for projects of 5 MW and smaller. Reference to reporting results to local governments should be removed. The recommendation that applicants perform these analyses should be moved to agency guidance.</p>	<p>DEQ agrees with commenters. DEQ will strike the provision from the proposed regulation and will include it in agency guidance. DEQ will modify the provision so that, rather than recommending that the results of the desktop analyses be reported to local government, the guidance provision will encourage applicants to discuss potential problems identified by the analyses with staff at DGIF, DHR, and DCR, as appropriate.</p> <p>DEQ will also place this recommendation in the Wind PBR guidance. The Combustion RAP unanimously recommended this provision for future Combustion PBR agency guidance. If the proposed Combustion PBR regulation is finalized as currently expected.</p> <p>DEQ will include the provision in Combustion PBR guidance. The provision and guidance would then be consistent for all three renewable energy PBR regulations, and the PBR regulations themselves would substantively be no more stringent than the SCC’s existing requirements.</p> <p>(Note: This desktop analysis is sometimes called a “fatal flaw” analysis and would typically be done by developers as part of their due diligence, with or without a provision in regulations or guidance.)</p>
<p>Pam Faggert, Dominion</p>	<p><b>Refinements to categorical criteria in 9VAC15-60-130 A 2 b, c, d:</b>                      Commenter believes that DEQ should extend the coverage of this “de minimis” provision to as many projects as possible but still ensure that the projects have minimal impact to the Commonwealth’s natural resources. Accordingly, commenter recommends that the refinements developed by the Combustion RAP (after the Solar RAP completed its work) should also be included in the Solar PBR, as applicable.</p>	<p>DEQ agrees with the commenter and will add the refinements developed by staff of DHR and DGIF – and recommended unanimously by the Combustion RAP – to the relevant subsections of the Solar PBR, with minor edits to make the provisions conform to the structure of the Solar PBR.</p>

<p>Pam Faggert, Dominion</p>	<p><b>Last sentence of 9VAC15-60-20 C regarding applicability:</b>                  Commenter expresses support for this sentence, which makes clear that projects that qualify for the “de minimis” provisions of 9VAC15-60-130 are covered by the PBR regulation.</p>	<p>DEQ notes and appreciates the commenter’s support of the provision.                  (No change to proposed regulation.)</p>
<p>Pam Faggert, Dominion</p>	<p><b>Definition of “small solar energy project” in 9VAC15-60-20:</b>                  Commenter recommends deletion of the phrase “whose main purpose is to supply electricity,” as it is redundant. This change would also be consistent with the proposed Combustion PBR.</p>	<p>DEQ agrees with the commenter and will delete this phrase from the definition of “small solar energy project.”</p>

Many provisions in the 2009 statute are complex and sometimes challenging to interpret and implement in regulation. Each RAP – for Wind, Offshore Wind, Solar, Combustion, and Water Related – has diligently analyzed the statutory provisions and recommended regulatory provisions, almost always by unanimous consensus. Although new stakeholders with special expertise in the field being regulated have joined these RAP’s, many of the stakeholder groups have remained consistent from one RAP to the next. As a result, knowledgeable representatives from state agencies, environmental advocacy groups, and developers have been able to evaluate and re-evaluate these issues over time. Each successive RAP has recommended refinements and improvements. DEQ agrees with commenters that improvements developed by consensus of the Combustion RAP, where applicable, should be included in the Solar PBR, thereby increasing consistency among the renewable energy PBR regulations.

**All changes made in this regulatory action**

*Please list all changes that are being proposed and the consequences of the proposed changes. Describe new provisions and/or all changes to existing sections.*

9 VAC 15-60 is a new chapter designed to implement the statutory mandates of Virginia 2009 Acts of Assembly Chapters 808 and 854 (“the 2009 statute”), which move permitting authority for environmental requirements of small renewable energy projects from the State Corporation Commission (SCC) to the Department of Environmental Quality (DEQ).

The legislation requires DEQ to develop “permits by rule,” which are streamlined permitting vehicles utilized in DEQ’s solid waste division, and which set forth “up front” what requirements all applicants must meet in order to be covered by the permit by rule. The legislation further requires that the regulations include standards necessary to protect the Commonwealth’s natural resources. This permit by rule seeks to balance the two statutory goals – (1) to streamline and facilitate development of small renewable energy projects and (2) to protect natural resources.

Pursuant to the statute's provisions, DEQ determined that more than one permit by rule will be necessary to address all renewable media. This permit by rule addresses solar energy projects.

#### HOW THE PERMIT BY RULE FOR SOLAR ENERGY COMPARES WITH CURRENT LAW:

Under current law, developers of proposed solar energy projects must apply to the SCC, where hearings are held to determine what natural-resource protections will be required at the proposed project site. The SCC's determination is made on a case-by-case basis. The SCC receives input from the natural-resource agencies regarding the agencies' recommendations for needed resource protections for a proposed project. To the best of our knowledge, there are few guidelines in place to inform either the agencies' recommendations or the SCC's acceptance or rejection of those recommendations. There are no time limitations on how long the SCC process may take.

Under the 2009 statute applicants must apply to DEQ for a permit by rule regarding the construction and operation of a proposed solar energy project of 100 megawatts or less. Under this permit by rule an applicant for a project of >5 megawatts to 100 megawatts must apply for a permit by rule, and projects 500 kW to 5 megawatts must submit a copy of the local government approval to DEQ and perform other minimal requirements. The permit by rule sets forth, in detailed fashion, what all applicants must do to gain permit coverage or provide notification. The combination of the permit by rule plus DEQ's guidance will fully explain how each standard must be achieved. The permit by rule also sets forth the requirement that DEQ process that application and render a decision to the applicant within 90 days. The other natural-resource agencies will continue to have input into this process, but in a different fashion than under existing law. All of the natural-resource agencies were represented on the Regulatory Advisory Panel (RAP) that developed recommendations for this regulation. Further, these agencies will be consulted by DEQ when DEQ makes a decision about each permit application, as required by the 2009 statute. By these methods, input from the natural-resource agencies will continue to be a vital part of the permit decision, but within carefully defined structures and time frames.

#### HOW THE NEW PERMIT BY RULE FOR SOLAR ENERGY PROJECTS ADDRESSES GOALS OF INDUSTRY AND OF ENVIRONMENTAL INTERESTS:

Nationwide, representatives of the solar-energy industry generally articulate three major needs when they seek governmental permission to develop a solar project: certainty, timeliness, and reasonableness. As stated above, the permit by rule will provide a very high degree of certainty and timeliness. As for reasonableness, the permit by rule also provides the most appropriate and reasonable standards the RAP and DEQ could develop to balance facilitating renewable energy with protecting natural resources, in compliance with the mandates of the 2009 statute. Accordingly, DEQ believes that the permit by rule puts solar developers in a better position than did existing law.

The statute and the permit by rule also address resource-protection needs often cited by environmental advocacy groups and by DEQ's sister agencies as being top priorities. Under the new regimen, significant resource protections will be required for every project that does not fit within the "de minimis" provisions, even if no advocacy group has the time or resources to comment on an individual application. That is the nature of a permit by rule -- to lay out uniform, across-the-board standards for all projects. Virginia's 2009 statute goes further than most other states' standards do in requiring certain natural-resource protections, and the proposed

regulations implement those protections, as set forth below. Further, DEQ has an effective apparatus for regulatory enforcement, which some observers of current renewable energy projects believe the SCC lacks. Thus, the permit by rule achieves many of the goals of environmental groups with respect to renewable energy projects.

In summary, the statute and the permit by rule for solar energy projects provide a number of advantages, for both industry and environmental interests. They help promote development of solar energy, which appears to be an environmental and economic benefit to all citizens.

**HOW THE NEW PERMIT BY RULE FITS INTO LOCAL, STATE, AND FEDERAL REQUIREMENTS:**

The permit by rule implements the requirements of the 2009 legislation, which defines natural-resource protections at small solar energy projects in Virginia. For the most part, the resources enumerated in the 2009 legislation are not the subject of regulation under current law, but rather are the subject of advisory consultations with natural-resource agencies other than DEQ. DEQ is a regulatory agency. The 2009 statute makes clear that DEQ’s regulatory environmental permits (air, water, waste, wetlands, etc.), as well as those regulatory permits of any other agency, if relevant, are still required. The 2009 statute requires that the permit by rule applicant submit to DEQ certification that he has obtained, or applied for, these other environmental permits. The 2009 statute does not abrogate these other permit requirements. Nor does it abrogate local requirements, as reflected by the fact that the 2009 statute requires the applicant to submit to DEQ certification that he has complied with local land-use provisions. Since the 2009 statute does not explicitly speak to federal requirements, the proposed regulation does not reference federal requirements either. It seems clear, however, that the applicant must comply with requirements of FAA and other federal agencies.

	<b>Section</b>	<b>Requirements</b>	<b>Rationale</b>
	10	<p style="text-align: center;">Definitions.</p> <p>The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:</p> <p>"Applicant" means the owner or operator who submits an application to the department for a permit by rule pursuant to this chapter.</p> <p>"Archive search" means a search of DHR’s cultural resource inventory for the presence of previously recorded archaeological sites and for architectural structures and districts.</p>	<p>The definitions explain meanings of relevant terms as these terms are used in the proposed regulation. In a number of instances, the definitions reflect specific decisions debated and recommended by the RAP, and these definitions are not intended to have application beyond the reach of the proposed regulation. Where possible, the RAP used definitions taken from the natural-resource agencies’ existing laws and regulations.</p> <p>The definition of “archive search” was suggested by DHR. It represents an abbreviated, low- or no-cost survey that can be performed by a non-professional. Unlike the Analysis requirement for solar</p>

		<p>"Coastal Avian Protection Zones" or "CAPZ" means the areas designated on the map of "Coastal Avian Protection Zones" generated on the department's Coastal GEMS geospatial data system (9VAC15-60-120 C 1).</p> <p>"Concentrating Photovoltaics" or "CPV" means PV systems with equipment to focus or direct sunlight on the PV cells. For purposes of this chapter, CPV is included in the definition of PV.</p>	<p>projects subject to Part II of this proposed regulation, the archive search does not involve an obligation to discover or analyze as-yet-unidentified historic resources. DHR and the other members of the Solar RAP believed that this requirement was sufficient and appropriate for projects falling within the purview of 9VAC15-60-130 B.</p> <p>The CAPZ map and related regulatory provisions were originally developed and recommended by the Offshore/Coastal Wind RAP. These concepts were created chiefly by scientists from DGIF and the Center for Conservation Biology for use in DEQ's renewable energy regulations for projects located in nearshore (i.e., state) waters and on coastal land areas. The Solar RAP determined that no solar projects can be feasibly constructed in state waters, at least for the foreseeable future, that are large enough or of a character to trigger any of the requirements of this proposed Solar PBR. Accordingly, this regulation contains no definitions or other provisions relating to solar projects in state waters. The Solar RAP did believe, however, that solar projects might be feasibly constructed on coastal land areas, which might include some areas within the CAPZ, and that these projects might pose a risk to avian resources. For this reason, the regulation contains definitions and other provisions applicable to solar projects located in certain CAPZ.</p> <p>RAP members researched and discussed whether PV and CPV technology presented different potential risks to wildlife or historic resources. The RAP concluded that it did not and recommended that PV and CPV be treated the same under the solar PBR regulation.</p> <p>All definitions relating to PV are based on</p>
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		<p>"Department" means the Department of Environmental Quality, its director, or the director's designee.</p> <p>"DCR" means the Department of Conservation and Recreation.</p> <p>"DGIF" means the Department of Game and Inland Fisheries.</p> <p>"DHR" means the Department of Historic Resources.</p> <p>"Disturbance zone" means the area within the site directly impacted by construction and operation of the solar energy project, and within 100 feet of the boundary of the directly impacted area.</p> <p>"Historic resource" means any prehistoric or historic district, site, building, structure, object, or cultural landscape that is included or meets the criteria necessary for inclusion in the Virginia Landmarks Register pursuant to the authorities of § 10.1-2205 of the Code of Virginia and in accordance with 17VAC5-30-40 through 17VAC5-30-70.</p> <p>"Integrated PV" means photovoltaics incorporated into building materials, such as shingles.</p> <p>"Interconnection point" means the point or points where the solar energy project connects to a project substation for transmission to the electrical grid.</p> <p>"Other solar technologies" means</p>	<p>definitions of these terms found on the Department of Energy (DOE) website. They were reviewed and approved by the Solar RAP, which included a number of experts in the solar development industry.</p> <p>The definition of "disturbance zone" is important because the regulation prescribes certain environmental analyses or procedures that the applicant must perform within this area. Analyses and protections required for the disturbance zone are generally more detailed and stricter than those for the larger surrounding area or "site."</p> <p>Since the regulation is a state regulation, the RAP agreed that it was appropriate to utilize a Virginia definition of "historic resource."</p> <p>The Solar RAP concluded that only PV and CPV technologies are practicable in</p>
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	<p>materials or devices or methodologies of producing electricity from sunlight other than PV or CPV.</p> <p>"Natural heritage resource" means the habitat of rare, threatened, or endangered plant and animal species, rare or state significant natural communities or geologic sites, and similar features of scientific interest benefiting the welfare of the citizens of the Commonwealth.</p> <p>"Operator" means the person responsible for the overall operation and management of a solar energy project.</p> <p>"Owner" means the person who owns all or a portion of a solar energy project.</p> <p>"Parking lot" means an improved area, usually divided into individual spaces and covered with pavement or gravel, intended for the parking of motor vehicles.</p> <p>"Permit by rule" means provisions of the regulations stating that a project or activity is deemed to have a permit if it meets the requirements of the provision.</p> <p>"Person" means any individual, partnership, firm, association, joint venture, public or private corporation,</p>	<p>Virginia at the present time. They wanted to provide, however, for the contingency that other technologies may become feasible in the future.</p> <p>The definition of "parking lot" was suggested by DHR to assist the RAP in defining one of the categories of projects that the group agreed should not trigger any certification or notification requirements. The term is utilized in 9VAC15-60-130 A.</p> <p>Although the 2009 statute directs DEQ to develop permits by rule for renewable energy projects, the term "permit by rule" had never been defined in either statute or regulation until promulgation of the Wind PBR. "Permit by rule" is a permitting vehicle utilized in DEQ's solid waste permitting programs. Both the Wind RAP and the Solar RAP adhered as closely as possible, given all the 2009 statute's provisions, to the permit by rule model from solid waste in developing standards for the current permit by rule. The regulatory definition is a new one, but it conforms to DEQ's practices for permits by rule in the solid waste program.</p>
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	<p>trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town, or other political subdivision of the Commonwealth, any interstate body, or any other legal entity.</p> <p>“Photovoltaic” or “PV” means materials and devices that absorb sunlight and convert it directly into electricity by semiconductors.</p> <p>“Photovoltaic cell” or “PV cell” means a solid state device that converts sunlight directly into electricity. PV cells may be connected together to form PV modules, which in turn may be combined and connected to form PV arrays (often called PV panels).</p> <p>“Photovoltaic system” or “PV system” means PV cells, which may be connected into one or more PV modules or arrays, including any appurtenant wiring, electric connections, mounting hardware, power-conditioning equipment (inverter), and storage batteries.</p> <p>"Pre-construction" means any time prior to commencing land-clearing operations necessary for the installation of energy-generating structures at the small solar energy project.</p> <p>"Rated capacity" means the maximum capacity of a solar energy project based on Photovoltaic USA Test Conditions (PVUSA Test Conditions) rating.</p> <p>"Site" means the area containing a solar energy project that is under common ownership or operating</p>	<p>Members of the Solar RAP – especially solar developers and the representative from DMME – recounted that there has been significant controversy in the solar industry concerning the nameplate rated capacity of solar panels or systems as provided by some manufacturers. For purposes of granting certain tax credits, the federal government requires input from a third party. Hence the existence of PVUSA Test Conditions. The RAP recommended that this regulation adopt this same meaning of “rated capacity” as that used by the federal government.</p>
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	<p>control. Electrical infrastructure and other appurtenant structures up to the interconnection point shall be considered to be within the site.</p> <p>"Small renewable energy project" means (i) an electrical generation facility with a rated capacity not exceeding 100 megawatts that generates electricity only from sunlight, wind, falling water, wave motion, tides, or geothermal power, or (ii) an electrical generation facility with a rated capacity not exceeding 20 megawatts that generates electricity only from biomass, energy from waste, or municipal solid waste.</p> <p>"Small solar energy project," "solar energy project," or "project" means a small renewable energy project that (i) generates electricity from sunlight, <del>whose main purpose is to supply electricity,</del> consisting of one or more PV systems and other appurtenant structures and facilities within the boundaries of the site; and (ii) is designed for, or capable of, operation at a rated capacity equal to or less than 100 megawatts. Two or more solar energy projects otherwise spatially separated but under common ownership or operational control, which, <del>if connected to the electrical grid,</del> are connected to the electrical grid under a single interconnection agreement, shall be considered a single solar energy project. Nothing in this definition shall imply that a permit by rule is required for the construction of test structures to determine the appropriateness of a site for the development of a solar energy project.</p>	<p>This is the definition of "small renewable energy project" set forth in the 2009 statute.</p> <p>As explained above, the phrase "whose main purpose is to supply electricity" is being stricken from the definition of "small solar energy project." One commenter noted that the phrase is redundant. DEQ also believes that the phrase should be stricken so that it is clear that electricity-generating projects that may also serve a research or demonstration purpose are still covered by this regulation.</p> <p>As explained above, phrases that refer to a lack of interconnection to the electrical grid are being stricken. DEQ is awaiting advice from the OAG regarding whether interconnection is jurisdictional for coverage by this regulation. When the issue is resolved, DEQ will provide the information via its website.</p> <p>The definition of "small solar energy project" includes a "de minimis" exemption for projects equal to or less than 5 megawatts, equal to or less than 2 disturbed acres, or meeting certain categorical criteria. Under current law, the SCC's regulations provide a 5-megawatt exemption for all renewable energy projects. Although the 2009 statute does not explicitly grant DEQ authority to define a "de minimis"</p>
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		<p>"T&amp;E," "state threatened or endangered species," or "state-listed species" means any wildlife species designated as a Virginia endangered or threatened species by DGIF pursuant to the § 29.1-563-570 of the Code of Virginia and 4VAC15-20-130.</p> <p>"VLR" means the Virginia Landmarks Register (9VAC15-60-120 B 1).</p> <p>"VLR-eligible" means those historic resources that meet the criteria necessary for inclusion on the VLR pursuant to 17VAC5-30-40 through 17VAC5-30-70 but are not listed in VLR.</p> <p>"VLR-listed" means those historic resources that have been listed in the VLR in accordance with the criteria of 17VAC5-30-40 through 17VAC5-30-70.</p> <p>"Wildlife" means wild animals; except, however, that T&amp;E insect species shall only be addressed as part of natural heritage resources and shall not be considered T&amp;E wildlife.</p>	<p>exemption, the intent of the statute is clearly to make development of renewable energy projects easier, not harder. This regulation therefore carries over a similar scheme of no or greatly reduced requirements, so that constructing and operating a solar project is not harder for developers, especially for individuals and small businesses. The "de minimis" levels are discussed more fully in the "Alternatives" section of this submission.</p> <p>This definition of "T&amp;E" purposely focuses on those T&amp;E species designated by DGIF, and omits T&amp;E insects designated by VDACS. See note below regarding definition of "wildlife."</p> <p>Background information discussed by the Wind RAP and accepted by the Solar RAP: Theoretically, a simple word like "wildlife" should be easy to define; however, the RAP discovered that quite the opposite is true. The Wind RAP reviewed numerous definitions from both state and federal laws and regulations, discussed numerous related issues and sub-issues, and finally concluded it best to use a broad, general definition. Details like "non-native," "exotic," "undomesticated," etc. will be addressed in DEQ's guidance as needed.</p>
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			<p>The Wind RAP, including representatives of the Virginia Department of Agriculture and Consumer Services (VDACS) and of DGIF, agreed that T&amp;E insects should be treated as part of Natural Heritage Resources and not as wildlife. This approach is consistent with how T&amp;E plants and insects are addressed under VDACS' law as it applies to all development projects. That is, developers consult DCR's mapping of Natural Heritage Resources. If habitat for T&amp;E plants or insects is found on the proposed development site, then the developer consults with VDACS. Pursuant to VDACS' law, landowners and persons acting with the landowner's explicit permission – who could include developers who lease land for wind energy projects – can take any action they deem appropriate on their own land. This proviso to the definition of "wildlife" is designed to prevent the presence of T&amp;E insects from becoming an automatic, mandatory trigger for wildlife mitigation under the regulation. This information was summarized for the Solar RAP, whose members agreed with this approach.</p>
20		<p>Authority and applicability.</p> <p>A. This regulation is issued under authority of Article 5 (§ 10.1-1197.5 et seq.) of Chapter 11.1 of Title 10.1 of the Code of Virginia. The regulation contains requirements for solar-powered electric generation projects consisting of PV systems and associated facilities with <del>either no connection to the electrical grid or a single interconnection to the electrical grid, that are designed for, or capable of, operation at a rated capacity equal to or less than 100 megawatts.</del></p> <p>B. The department has determined that</p>	<p>This section reiterates the statute's provision that the permit by rule shall apply to solar projects of 100 megawatts and smaller. The SCC retains authority over projects larger than 100 megawatts.</p> <p>As explained previously, all phrases referring to no connection to the grid are being stricken.</p> <p>The Solar RAP recommended the different levels of PBR requirements, depending on the rated capacity, disturbance zones, and specific categories of projects.</p> <p>Part II: Based on the consensus</p>

	<p>a permit by rule is required for small solar energy projects with a rated capacity greater than five (5) megawatts and a disturbance zone greater than 10 acres, provided that the projects do not otherwise meet the criteria for Part III (9VAC15-60-130) of this chapter; and this regulation contains the permit by rule provisions for these projects in Part II (9VAC15-60-30 et seq.) of this chapter.</p> <p>C. The department has determined that different provisions should apply to projects that meet the criteria as set forth in Part III (9VAC15-60-130) of this chapter, and this regulation contains the requirements, if any, for these projects in Part III (9VAC15-60-130 A and 9VAC15-60-130 B) of this chapter. Projects that meet the criteria for Part III of this chapter are deemed to be covered by the permit by rule.</p> <p>D. The department has determined that small renewable energy projects utilizing other solar technologies shall fulfill all of the requirements in 9VAC15-40 as prescribed for small wind energy projects, unless (1) the owner or operator of the proposed project presents to the department information indicating that the other solar technology presents no greater likelihood of significant adverse impacts to natural resources than does PV technology, and (2) the department determines that it is appropriate for the proposed project utilizing the other solar technology to meet the requirements of this chapter (9VAC15-60) or of some modification to either 9VAC15-40 or 9VAC15-60, as prescribed by the department for that particular project.</p>	<p>recommendations of the Solar RAP, this proposal requires that projects with rated capacity of 5 MW or more and a disturbance zone of 10 acres or more meet the requirements set forth in Part II of the PBR regulation (9VAC15-60-30 et seq.) – which are the 14 statutory criteria – as long as the project does not exceed a rated capacity of 100 MW.</p> <p>Part III: The regulation provides in Part III (9VAC15-60-130 A &amp; B) only minimal or no requirements for projects less than 5MW of rated capacity, less than 10 disturbed acres, or meeting the criteria of specified categories.</p> <p>The RAP concluded that solar technologies other than PV and CPV might pose significant risks to natural resources; however, these risks cannot be analyzed when the other technologies that might someday be feasibly developed in Virginia are as yet unknown. The RAP recommended this provision to enable new or different technologies to be developed, without going through a change in the regulation, and yet with appropriate scrutiny and requirements tailored to the particular project and technology. If appropriate, new regulations can be developed in the future to address other technologies that are feasible and financially viable in Virginia.</p>
30	<p>Application for permit by rule for solar energy projects with rated capacity greater than 5 megawatts and</p>	<p>This section lists the application requirements as set forth in the 2009 statute. If a particular requirement</p>

	<p>disturbance zone greater than 10 acres.</p> <p>A. The owner or operator of a small solar energy project with a rated capacity greater than five (5) megawatts and a disturbance zone greater than 10 acres, provided that the project does not otherwise meet the criteria for Part III (9VAC15-60-130) of this chapter, shall submit to the department a complete application, in which he satisfactorily accomplishes all of the following:</p> <ol style="list-style-type: none"> <li>1. In accordance with § 10.1-1197.6 B 1 of the Code of Virginia, and as early in the project development process as practicable, furnishes to the department a notice of intent, to be published in the Virginia Register, that he intends to submit the necessary documentation for a permit by rule for a small renewable energy project;</li> <li>2. In accordance with § 10.1-1197.6 B 2 of the Code of Virginia, furnishes to the department a certification by the governing body of the locality or localities wherein the small renewable energy project will be located that the project complies with all applicable land use ordinances;</li> </ol>	<p>warrants detailed explanation, then that explanation is set forth either in guidance, in a subsequent section of the regulation, or in both.</p> <p>The application requirements are quite specific, as is the practice in a permit by rule. Developers generally value that certainty of knowing exactly what they will be required to do. It enables them to plan their project's design and operation, and to secure financing. Virginia's regulations appear superior to most states' approaches in this respect, since most states largely make permitting decisions on a case-by-case, <i>ad hoc</i> basis.</p> <p>The 2009 statute authorizes DEQ to develop a permit by rule for the "construction and operation" of small renewable energy projects. The statute does not address other major phases of a project's development, namely siting and decommissioning. There is a subtle but significant difference between siting decisions (that is, whether or not a developer can put a project in a particular location) and permitting decisions (that is, how a developer must construct and operate the project once the site has been approved). Since the 2009 statute only authorizes DEQ to develop a permit program for construction and operation of projects, it is assumed that local governments will essentially be making the siting decisions in the process of determining whether to grant special use permits, zoning provisions, and the like. Likewise, decommissioning decisions will presumably fall to local governments, the</p>
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		<p>3. In accordance with § 10.1-1197.6 B 3 of the Code of Virginia, furnishes to the department copies of all interconnection studies undertaken by the regional transmission organization or transmission owner, or both, on behalf of the small renewable energy project, <del>if the project will be connected to the electrical grid;</del></p> <p>4. In accordance with § 10.1-1197.6 B 4 of the Code of Virginia, furnishes to the department a copy of the final interconnection agreement, <del>if any,</del> between the small renewable energy project and the regional transmission organization or transmission owner indicating that the connection of the small renewable energy project will not cause a reliability problem for the system. If the final agreement is not available, the most recent interconnection study shall be sufficient for the purposes of this section. When a final interconnection agreement is complete, it shall be provided to the department.</p>	<p>provisions of the developer's lease agreement, or other relevant entities or documents. Siting and decommissioning criteria are not included in the permit by rule. Decisions regarding these provisions are consistent with advice from the Office of the Attorney General (OAG). As specified in the statute and regulation, DEQ expects to receive certification from the local government that the applicant has met all local zoning, use permit, and other land-use-related requirements before DEQ considers the applicant's permit by rule application.</p> <p>3. &amp; 4. For the proposed Solar PBR, language was added to these sections to account for the fact that a number of solar projects may not be connected to the electrical grid, but rather provide electrical power to be used on site. Upon further reflection and discussion of the issue by the Combustion RAP, DEQ is striking this language, pending resolution by the OAG of whether projects that are not interconnected to the grid are covered by this regulation. Resolution of this legal issue will be provided on DEQ's website when it becomes available. The regulation will be silent on the issue beyond the mention of interconnection studies and agreements in 3. &amp; 4. which are taken from the 2009 statute.</p>
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	<p>The department shall forward a copy of the agreement or study to the State Corporation Commission;</p> <p>5. In accordance with § 10.1-1197.6 B 5 of the Code of Virginia, furnishes to the department a certification signed by a professional engineer licensed in Virginia that the maximum generation capacity of the small solar energy project, as designed, does not exceed 100 megawatts;</p> <p>6. In accordance with § 10.1-1197.6 B 6 of the Code of Virginia, furnishes to the department an analysis of potential environmental impacts of the small renewable energy project's operations on attainment of national ambient air quality standards;</p> <p>7. In accordance with § 10.1-1197.6 B 7 of the Code of Virginia, furnishes to the department, where relevant, an analysis of the beneficial and adverse impacts of the proposed project on natural resources. The owner or operator shall perform the analyses prescribed in 9VAC15-60-40. For wildlife, that analysis shall be based on information on the presence, activity, and migratory behavior of wildlife to be collected at the site for a period of time dictated by the site conditions and biology of the wildlife being studied, not exceeding 12 months;</p> <p>8. In accordance with § 10.1-1197.6 B 8 of the Code of</p>	<p>6. Although some of the other renewable media addressed by the 2009 statute involve potentially adverse impacts on attainment of NAAQS, it is not anticipated that PV solar energy projects will have any such adverse impacts. DEQ's guidance will explain that the applicant may meet the standard above by submitting a simple statement to this effect.</p> <p>If the applicant also chooses to state the solar energy project's beneficial impacts on attainment of NAAQS, he may do so.</p> <p>If the applicant is seeking offset credit for his solar energy project, he may append that information to this application. By being part of a regulatory application, the status of the applicant's offset request may be enhanced. A similar issue related to nutrient credits has also arisen. If this issue proves to be relevant for solar projects, then the same comment would apply.</p> <p>8. General comments about the 2009</p>
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	<p>Virginia, furnishes to the department a mitigation plan pursuant to 9VAC15-60-60 that details reasonable actions to be taken by the owner or operator to avoid, minimize, or otherwise mitigate such impacts, and to measure the efficacy of those actions; provided, however, that the provisions of 9VAC15-60-30 A 8 shall only be required if the department determines, pursuant to 9VAC15-60-50, that the information collected pursuant to § 10.1-1197.6 B 7 of the Code of Virginia and 9VAC15-60-40 indicates that significant adverse impacts to wildlife or historic resources are likely. The mitigation plan shall be an addendum to the operating plan of the solar energy project, and the owner or operator shall implement the mitigation plan as deemed complete and adequate by the department. The mitigation plan shall be an enforceable part of the permit by rule;</p> <p>9. In accordance with § 10.1-1197.6 B 9 of the Code of Virginia, furnishes to the department a certification signed by a professional engineer licensed in Virginia that the project is designed in accordance with 9VAC15-60-80;</p> <p>10. In accordance with § 10.1-1197.6 B 10 of the Code of Virginia, furnishes to the department an operating plan that includes a description of how the project will be operated in compliance with its mitigation plan, if such a mitigation plan is</p>	<p>statute: The 2009 statute requires Virginia applicants to develop a mitigation plan for likely “significant adverse impacts” to both wildlife and historic resources, and “to measure the efficacy” of those mitigation plans. Research has not produced evidence of such across-the-board requirements in other states.</p> <p>Some business interests may pronounce these aspects of Virginia’s regulations stricter or more burdensome than those of other states; however, the regulations implement a statute in which these standards are mandated.</p> <p>Across the country, wildlife experts generally recommend that mitigation and monitoring be done regarding bat fatalities (for wind projects) and other wildlife; and historic resources experts also recommend mitigation by design modifications, screening, or offsets. Virginia appears to be ahead of the curve on these environmental protections.</p> <p>Different constituencies may have different views about the costs and benefits of these requirements. In the final analysis, Virginia’s statutory mandates for mitigation and post-construction monitoring are policy decisions made by the General Assembly after listening to the views of stakeholders on all sides of the issues. The regulation attempts merely to implement these mandates, and to do so as faithfully, fairly, and reasonably as possible.</p> <p>10. This provision makes clear that DEQ is concerned only with the aspects of the project’s operating plan that involve implementation of the mitigation plan, if a mitigation plan is required. Enforcing health and safety and other operating-plan issues are not within DEQ’s</p>
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	<p>required pursuant to 9VAC15-60-50;</p> <p>11. In accordance with § 10.1-1197.6 B 11 of the Code of Virginia, furnishes to the department a detailed site plan meeting the requirements of 9VAC15-60-70;</p> <p>12. In accordance with § 10.1-1197.6 B 12 of the Code of Virginia, furnishes to the department a certification signed by the applicant that the small solar energy project has applied for or obtained all necessary environmental permits;</p> <p>13. Prior to authorization of the project and in accordance with §§ 10.1-1197.6 B 13 and 10.1-1197.6 B 14 of the Code of Virginia, conducts a 30-day public review and comment period and holds a public meeting pursuant to 9VAC15-60-90. The public meeting shall be held in the locality or, if the project is located in more than one locality, in a place proximate to the location of the proposed project. Following the public meeting and public comment period, the applicant shall prepare a report summarizing the issues raised by the public and include any written comments received and the applicant's response to those comments. The report shall be provided to the department as part of this application; and</p> <p>14. In accordance with 9VAC15-60-110, furnishes to the department the appropriate fee.</p> <p>B. Within 90 days of receiving all of the required documents and fees listed in subsection A of this section, the</p>	<p>authority over natural-resource protections, and they are left to the authority of local government and other relevant entities.</p> <p>13. The 2009 statute provides that the applicant must hold a public meeting. The statute also provides that a 30-day public review and comment period must occur but does not specify who is to conduct it. The RAP discussed whether that entity should be the applicant or DEQ. In the waste permit by rule, the applicant is the party who conducts this comment period. The RAP endorsed the proposed provision, which assigns the applicant responsibility for both the public meeting and public comment period. One advantage of having the applicant perform this function is that it provides an opportunity for the applicant and public to seek common ground on controversial issues before the final application is submitted to DEQ.</p> <p>B. The 90-day time limit for permit processing is expected to be beneficial to</p>
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	<p>department shall determine, after consultation with other agencies in the Secretariat of Natural Resources, whether the application is complete and whether it adequately meets the requirements of this chapter, pursuant to § 10.1-1197.7 A of the Code of Virginia.</p> <ol style="list-style-type: none"> <li>1. If the department determines that the application meets the requirements of this chapter, then the department shall notify the applicant in writing that he is authorized to construct and operate a small solar energy project pursuant to this chapter.</li> <li>2. If the department determines that the application does not meet the requirements of this chapter, then the department shall notify the applicant in writing and specify the deficiencies.</li> <li>3. If the applicant chooses to correct deficiencies in a previously submitted application, the department shall follow the procedures of this subsection and notify the applicant whether the revised application meets the requirements of this chapter within 60 days of receiving the revised application.</li> <li>4. Any case decision by the department pursuant to this subsection shall be subject to the process and appeal provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).</li> </ol>	<p>developers, allowing them to proceed with their proposed projects in a timely fashion. It is another aspect of certainty that helps developers make planning decisions and obtain financing. Research indicates that this timeframe is significantly shorter than those used in many other states, and that a number of states do not even provide a time limit for permitting decisions. All RAP members, including representatives of the natural-resources sister agencies, agreed that an adequate and meaningful review of an application can be accomplished within 90 days.</p> <p>4. This provision reminds the public that the permit by rule, like all other DEQ regulations, affords the applicant (and others who have participated in the public participation process) full rights under the Administrative Process Act. These rights include the right to an informal hearing, formal hearing, or both.</p>
<p>40</p>	<p>Analysis of the beneficial and adverse impacts on natural resources.</p>	<p>The 2009 statute requires an applicant to analyze natural resources “where relevant.” “Relevant” is a hard word to define in narrative terms. The RAP</p>

	<p>A. Analyses of wildlife. To fulfill the requirements of § 10.1-1197.6 B 7 of the Code of Virginia, the applicant shall conduct pre-construction wildlife analyses. The analyses of wildlife shall include the following:</p> <ol style="list-style-type: none"> <li>1. Desktop surveys and maps. The applicant shall obtain a wildlife report and map generated from DGIF's Virginia Fish and Wildlife Information Service web-based application (9VAC15-60-120 C 3) or from a data and mapping system including the most recent data available from DGIF's subscriber-based Wildlife Environmental Review Map Service of the following: (i) known wildlife species and habitat features on the site or within two (2) miles of the boundary of the site; and (ii) known or potential sea turtle nesting beaches located within one-half (1/2) mile of the disturbance zone.</li> <li>2. Desktop map for avian resources in Coastal Avian Protection Zones (CAPZ). The applicant shall consult the</li> </ol>	<p>chose to define it operationally. That is, the wildlife, historic, and other natural resources enumerated in this section are “relevant” if they are detected in the disturbance zone or other specified area by use of the assessment tools prescribed in the regulation. Only the natural resources specified in this section can be deemed relevant. And these natural resources only become relevant if the prescribed methods indicate that they exist in the prescribed areas in or near the disturbance zone.</p> <p>A. The following wildlife analyses were agreed upon by the RAP members as appropriate tools for identifying potential impacts of a proposed solar project on important wildlife. DEQ guidance documents will explain the details of how these analyses should be conducted.</p> <p>Although the Wind PBR requires both desktop and field-survey analyses, the Solar RAP recommended that only desktop studies be required for solar projects. This recommendation reflects the fact that PV solar projects are not known to have extensive impacts on natural resources.</p> <ol style="list-style-type: none"> <li>1. (ii) The desktop survey for sea turtle nesting beaches is confined to ½ mile from the disturbance zone, as opposed to the 1-mile requirement for wind projects.</li> <li>2. Please see the “Alternatives” section of this submission for detailed comments regarding treatment of coastal avian resources and related issues.</li> </ol>
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	<p>"Coastal Avian Protection Zones" map generated on the department's Coastal GEMS geospatial data system (9VAC15-60-120 C 1) and determine whether the proposed solar energy project site will be located in part or in whole within one or more CAPZ.</p> <p>B. Analyses of historic resources. To fulfill the requirements of § 10.1-1197.6 B 7 of the Code of Virginia, the applicant shall also conduct a pre-construction historic resources analysis. The analysis shall be conducted by a qualified professional meeting the professional qualification standards of the Secretary of the Interior's Standards for Archeology and Historic Preservation (9VAC15-60-120 B 2) in the appropriate discipline. The analysis shall include each of the following:</p> <ol style="list-style-type: none"> <li>1. Compilation of known historic resources. The applicant shall gather information on known historic resources within the disturbance zone and within one-half (1/2) mile of the disturbance zone boundary and present this information on the context map referenced in 9VAC15-60-70 B, or as an overlay to this context map, as well as in tabular format.</li> <li>2. Architectural survey. The applicant shall conduct a field survey of all architectural resources, including cultural landscapes, 50 years of age or older, within the disturbance zone and within one-half (1/2) mile of the disturbance zone boundary and evaluate the eligibility of any identified resource for listing in the VLR.</li> <li>3. Archaeological survey. The</li> </ol>	<p>B. All RAP members agreed that the following assessment procedures, performed by a qualified professional, are appropriate tools for identifying potential impacts of a proposed solar project on historic resources, just as they are required for wind projects. Although impacts on historic resources tend to be, by their very nature, more qualitative than quantitative, RAP members were comfortable with the well-established protocols utilized by DHR and the U.S. Department of the Interior. DHR's regulations will be incorporated into DEQ's guidance documents to explain how the applicant should carry out the specified analyses.</p> <p>The general approach is for the applicant to perform desktop studies of the project area. If the desktop models indicate the presence of historic resources, then the applicant will proceed to perform field studies. Results of all studies will be reported to DEQ, along with the applicant's analysis of beneficial and adverse impacts of the proposed project on relevant historic resources.</p>
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		<p>applicant shall conduct an archaeological field survey of the disturbance zone and evaluate the eligibility of any identified archaeological site for listing in the VLR. As an alternative to performing this archaeological survey, the applicant may make a demonstration to the department that the project will utilize non-penetrating footings technology and that any necessary grading of the site prior to construction does not have the potential to adversely impact any archaeological resource.</p> <p>C. Analyses of other natural resources. To fulfill the requirements of § 10.1-1197.6 B 7 of the Code of Virginia, the applicant shall also conduct a pre-construction desktop survey of natural heritage resources within the disturbance zone.</p> <p>D. Summary report. The applicant shall provide to the department a report presenting the findings of the studies and analyses conducted pursuant to subdivisions A, B, and C of this subsection, along with all data and supporting documents. The applicant shall assess and describe the expected beneficial and adverse impacts, if any, of the proposed project on wildlife and historic resources identified by these studies and analyses.</p>	<p>3. (Alternative) Solar RAP members discussed the fact that technology exists whereby solar panel footings do not penetrate the earth. The RAP agreed that use of this technology would obviate the need to analyze impacts to archaeological resources.</p> <p>C. RAP members agreed that Natural Heritage Resources (but not Scenic Resources – a change from the Wind PBR requirements) should be analyzed by the applicant, in addition to the wildlife and historic resources addressed above. Natural Heritage Resources are a major area of responsibility for DCR, an agency within the Secretariat of Natural Resources. Whereas this resource tends to involve habitat and is not specifically addressed in the 2009 statute (as are “wildlife” and “historic resources”), they are “natural resources,” and the statute requires that “natural resources” be analyzed. As discussed previously, it is especially important to include Natural Heritage Resources in the regulation, because they indicate the presence of T&amp;E insects, which are a type of wildlife that the 2009 statute is interpreted to include. If a mitigation plan is required for wildlife under the Solar PBR, then the applicant may choose to protect Natural Heritage Resources as a possible way to mitigate for impacts to T&amp;E wildlife. (See mitigation section below.)</p>
50		Determination of likely significant adverse impacts.	

	<p>A. The department shall find that significant adverse impacts to wildlife are likely whenever the wildlife analyses prescribed in 9VAC15-60-40 A document that any of the following conditions exists:</p> <p>1. State-listed T&amp;E wildlife are found to occur within the disturbance zone; or the disturbance zone is located on or within one-half (1/2) mile of a known or potential sea turtle nesting beach.</p> <p>2. The disturbance zone is located in part or in whole within zones 1, 2, 3, 4, 5, 10, 11, 12, or 14 on the Coastal Avian Protection Zones (CAPZ) map.</p>	<p>A. This section sets forth the mandatory triggers for a wildlife mitigation plan. The first mandatory trigger under the Wind PBR – presence of or habitat for bats – was considered by the Solar RAP not to be needed for the Solar PBR. Although wind turbines present a well-documented risk to bats, solar projects do not. Hence, there is no “bat” trigger for solar projects.</p> <p>1. The first solar mandatory trigger – T&amp;E wildlife – was agreed by all Solar RAP members to be worthy of note by solar developers. The “taking” of a T&amp;E species is actionable under both state and federal laws, totally apart from the PBR. The Solar RAP, like the Wind RAP, believed that a developer should make himself aware of the likelihood of T&amp;E species within his proposed disturbance zone and take reasonable measures to avoid the chance of “taking” a T&amp;E species.</p> <p>Sea turtles are T&amp;E species. Both the Wind RAP and Solar RAP believed that special attention should be required of these turtles’ nesting areas, so as to avoid potential harm to the species themselves. Apparently, construction at certain times of year and lighting that is not properly directed can inhibit nesting activities and/or confuse the turtles about which direction to find the open sea. The relevant area of the nesting beach from the disturbance zone has been reduced from 1 mile in the Wind PBR to ½ mile in the Solar PBR regulation.</p> <p>2. The location of the proposed solar project within one of the specified CAPZ areas was judged by the Solar RAP to constitute a likelihood of significant adverse impacts to the important avian resources within these critical geographic areas. The specified zones are the ones in which scientists have already</p>
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		<p>B. The department shall find that significant adverse impacts to historic resources are likely whenever the historic resources analyses prescribed by 9VAC15-60-40 B indicate that the proposed project is likely to diminish significantly any aspect of a historic resource's integrity.</p>	<p>researched and established the highly significant nature and extent of avian resources.</p> <p>B. The integrity of a historic resource is defined in DHR's regulations. This information will be provided and explained in DEQ's guidance.</p> <p>Although the standard for triggering a historic resources mitigation plan is largely qualitative, the Wind RAP and Solar RAP were comfortable that it is understood by DHR and qualified professionals who will be dealing with the standard on behalf of the applicant.</p>
60		<p>Mitigation plan.</p> <p>A. If the department determines that significant adverse impacts to wildlife or historic resources or both are likely, then the applicant shall prepare a mitigation plan.</p> <p>B. Mitigation measures for significant</p>	<p>Although the 2009 statute requires an applicant to analyze "natural resources," the only resources for which the statute authorizes or requires a mitigation plan are "wildlife" and "historic resources," and only if DEQ determines that "significant adverse impacts to wildlife or historic resources are likely." This section sets forth the criteria DEQ must use in making these determinations. These criteria operate as mandatory triggers for development of a wildlife mitigation plan or historic resources mitigation plan.</p> <p>A permit by rule is supposed to set forth across-the-board requirements "up front" for all applicants to follow. To the extent practicable, the RAP and DEQ followed this model in developing the proposed regulation. The analyses and mitigation triggers are "one size fits all." When it comes to mitigation, however, the RAP agreed that some degree of individualization will need to occur if the mitigation plan is to have meaningful impacts for the project in question. Consequently, the mitigation provisions set forth standard procedures for mitigation but leave room for case-specific determinations where needed.</p> <p>B. The regulation includes the</p>

	<p>adverse impacts to wildlife shall include:</p> <ol style="list-style-type: none"> <li>1. For state-listed T&amp;E wildlife, the applicant shall take all reasonable measures to avoid significant adverse impacts, or shall demonstrate in the mitigation plan what significant adverse impacts cannot practicably be avoided and why additional proposed actions are reasonable. These additional proposed actions may include best practices to avoid, minimize, or offset adverse impacts to resources analyzed pursuant to 9VAC15-60-40 A or 9VAC15-60-40 C.</li> <li>2. For proposed projects where the disturbance zone is located on or within one-half (½) mile of a known or potential sea turtle nesting beach, the applicant shall take all reasonable measures to avoid significant adverse impacts or shall demonstrate in the mitigation plan what significant adverse impacts cannot practicably be avoided, and why additional proposed mitigation actions are reasonable. Mitigation measures shall include the following:             <ol style="list-style-type: none"> <li>a. Avoiding construction within likely sea turtle crawl or nesting habitats during the turtle nesting and hatching season (May 20 - October 31). If avoiding construction during this period is not possible, then conducting daily crawl surveys of the disturbance zone (May 20 - August 31) and one (1) mile beyond the northern and southern reaches of the disturbance zone (hereinafter "sea turtle nest survey zone") between sunrise and 9:00 a.m. by qualified individuals who have the ability to distinguish accurately between nesting and non-nesting</li> </ol> </li> </ol>	<p>traditional hierarchy for mitigation – avoid, minimize, offset.</p> <ol style="list-style-type: none"> <li>1. The regulation provides that the applicant may opt to propose best practices to mitigate for <i>other</i> wildlife-related resources when he cannot fully avoid impacts to T&amp;E species. These proposals may include not only best practices to avoid “taking” a T&amp;E species, but also best practices to mitigate other resources analyzed under the wildlife and Natural Heritage Resources provisions, when impacts on T&amp;E species cannot be practicably avoided.</li> <li>2. The mitigation requirements for projects located on or near a sea turtle nesting beach are the same in the Solar PBR as they are in the Wind PBR, except that the relevant area is ½ mile of the beach, rather than the 1 mile provided in the Wind PBR. It appears that mitigation strategies for nesting sea turtles are well established, and the Solar RAP saw no reason to vary from DGIF’s original recommendations to the Offshore/Coastal Wind RAP.</li> </ol>
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	<p>emergences.</p> <p>b. If construction is scheduled during the nesting season, then including measures to protect nests and hatchlings found within the sea turtle nest survey zone.</p> <p>c. Minimizing nighttime construction during the nesting season, and designing project lighting during the construction and operational phases to minimize impacts on nesting sea turtles and hatchlings.</p> <p>3. For projects located in part or in whole within zones 1, 2, 3, 4, 5, 10, 11, 12, or 14 on the Coastal Avian Protection Zones (CAPZ) map, contribute \$1,000.00 per megawatt of rated capacity, or partial megawatt thereof, to a fund designated by the department in support of scientific research investigating the impacts of projects in CAPZ on avian resources.</p> <p>C. Mitigation measures for significant adverse impacts to historic resources shall include:</p> <p>1. Significant adverse impacts to VLR-eligible or VLR-listed architectural resources shall be minimized, to the extent practicable, through design of the solar energy project or the installation of vegetative or other screening.</p> <p>2. If significant adverse impacts to VLR-eligible or VLR-listed architectural resources cannot be avoided or minimized such that impacts are no longer significantly adverse, then the applicant shall develop a reasonable and proportionate mitigation plan that offsets the significantly adverse impacts and has a demonstrable public benefit and benefit for the</p>	<p>C. Impacts of solar energy projects on historic resources may typically be of three types: direct impact on historic architectural resources, indirect impact (view shed impacts) on historic resources, or direct impacts on archaeological historic resources. To mitigate for these impacts, the applicant can sometimes move the location of solar panels within the site to minimize these impacts, or he can construct or plant screening materials (usually at or near the historic resource) so that the solar project cannot be as fully viewed from the historic resource. If he cannot practicably screen the project from view so that the impact is no longer a significant diminishment of the historic resource's integrity, then the applicant must develop an offset. The DHR member on the Solar RAP gave several examples of mitigation strategies employed at sites of other types of</p>
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	<p>affected or similar resource.</p> <p>3. If any identified VLR-eligible or VLR-listed archaeological site cannot be avoided or minimized to such a degree as to avoid a significant adverse impact, significant adverse impacts of the project will be mitigated through archaeological data recovery.</p>	<p>development. Among these examples were photographing and recording information about historic buildings before destroying them when clearing the land for development, giving recovered archaeological data to a museum, and erecting a display of photographs and other data about the impacted resource at or near the project.</p>
<p>70</p>	<p>Site plan and context map requirements.</p> <p>A. The applicant shall submit a site plan that includes maps showing the physical features, topography and land cover of the area within the site, both before and after construction of the proposed project. The site plan shall be submitted at a scale sufficient to show, and shall include, the following: (i) the boundaries of the site; (ii) the location, height, and dimensions of all existing and proposed PV systems, other structures, fencing, and other infrastructure; (iii) the location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state maintained road; and (iv) water bodies, waterways, wetlands, and drainage channels.</p> <p>B. The applicant shall submit a context map including the area encompassed by the site and within five miles of the site boundary. The context map shall show state and federal resource lands and other protected areas, Coastal Avian Protection Zones, historic resources, state roads, waterways, locality boundaries,</p>	<p>A. The site plan should provide to DEQ and the public a clear idea of the chief features of the project site, including the size and placement of solar panels.</p> <p>B. This provision requires submittal of a context map of the area extending 5 miles around the boundary of the site. Discreet natural resources often occur within a larger context, such as a watershed. The RAP wanted to ensure that DEQ and the public are aware of the larger context in which the proposed project will exist, and its possible effect within that “big picture.”</p>

		<p>forests, open spaces, and transmission and substation infrastructure.</p>	<p>Of special note is the inclusion of “forests” and “open spaces” as required aspects of the context map. The potential impact of the project on forested wildlife habitat is addressed in the analyses section of the regulation. The Department of Forestry representative pointed out that the issue of forest fragmentation is a slightly different forest-related concern. Possible forest fragmentation will be reflected on the context map, and can be taken into account by the public and local government, among others. The same is true for converted farm land, a concern of the representative from VDACS. If the project entails development of former farm acreage, the map showing open spaces will make that fact clear.</p>
80		<p>Small solar energy project design standards.</p> <p>The design and installation of the small solar energy project shall incorporate any requirements of the mitigation plan that pertain to design and installation, if a mitigation plan is required pursuant to 9VAC15-60-50.</p>	<p>This provision clarifies that DEQ is interested only in the aspects of the project design that relate to mitigation. It should be clear to the public that DEQ is not guaranteeing the quality of the work or the credentials of the person doing the design. Nor will DEQ be involved in ensuring compliance of the design with any requirements other than mitigation. If, however, the applicant’s mitigation plan involves such things as locating a panel so as to avoid view shed impacts on a nearby historic resource, or to avoid the habitat of a T&amp;E species, DEQ will expect to see those adjustments reflected in the project design and will enforce them accordingly.</p>
90		<p>Public participation.</p> <p>A. Before the initiation of any construction at the small solar energy project, the applicant shall comply with this section. The owner or operator shall first publish a notice once a week for two consecutive weeks in a major local newspaper of general circulation informing the public that he intends to construct and operate a project eligible</p>	<p>This section sets forth the requirements the applicant must complete for compliance with the statutorily-mandated public-participation on any project. The requirements are minimum requirements and are similar to those utilized for other DEQ permits by rule.</p> <p>DEQ decided to require the applicant to submit electronic copies of the</p>

	<p>for a permit by rule. No later than the date of newspaper publication of the initial notice, the owner or operator shall submit to the department a copy of the notice along with electronic copies of all documents that the applicant plans to submit in support of the application. The notice shall include:</p> <ol style="list-style-type: none"> <li>1. A brief description of the proposed project and its location, including the approximate dimensions of the site, approximate number and configuration of PV systems, and approximate maximum height of PV systems;</li> <li>2. A statement that the purpose of the public participation is to acquaint the public with the technical aspects of the proposed project and how the standards and the requirements of this chapter will be met, to identify issues of concern, to facilitate communication, and to establish a dialogue between the owner or operator and persons who may be affected by the project;</li> <li>3. Announcement of a 30-day comment period in accordance with subsection C of this section, and the name, telephone number, address, and email address of the applicant who can be contacted by the interested persons to answer questions or to whom comments shall be sent;</li> <li>4. Announcement of the date, time, and place for a public</li> </ol>	<p>documents that will be placed in a location near the proposed project -- documents that are required in support of the permit by rule application. This requirement should not be burdensome for the applicant, since all of these documents are likely to have been generated as electronic documents. It is increasingly the case that newspapers do not reach large segments of the public. DEQ will seek ways to make project notice and application information available electronically for the benefit of the public.</p> <ol style="list-style-type: none"> <li>1. This brief description will allow the public and interested persons who track all such developments the ability to discern, at a glance, whether they need to be concerned about the proposed solar energy project.</li> </ol>
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	<p>meeting held in accordance with subsection D of this section; and</p> <p>5. Location where copies of the documentation to be submitted to the department in support of the permit by rule application will be available for inspection.</p> <p>B. The owner or operator shall place a copy of the documentation in a location accessible to the public during business hours for the duration of the 30-day comment period in the vicinity of the proposed project.</p> <p>C. The public shall be provided at least 30 days to comment on the technical and the regulatory aspects of the proposal. The comment period shall begin no sooner than 15 days after the applicant initially publishes the notice in the local newspaper.</p> <p>D. The applicant shall hold a public meeting not earlier than 15 days after the beginning of the 30-day public comment period and no later than seven days before the close of the 30-day comment period. The meeting shall be held in the locality or, if the project is located in more than one locality, in a place proximate to the location of the proposed project.</p> <p>E. For purposes of this chapter, the applicant and any interested party who submits written comments on the proposal to the applicant during the public comment period or who signs in and provides oral comments at the public meeting shall be deemed to have participated in the proceeding for a permit by rule under this chapter and pursuant to § 10.1-1197.7 B of the Code of Virginia.</p>	<p>D. It may be difficult for members of the public to understand that their comments should be limited to the technical and regulatory aspects of the proposal. Those aspects are delineated in DEQ's permit by rule. Comments on factors beyond the scope of the 2009 statute and the permit by rule are not within DEQ's authority to address. Those comments should be directed to the local government or to whoever has authority over the issues.</p> <p>E. The RAP recognized that, for legal purposes, it is important to define clearly who has participated in the public comment period and therefore has the right to appeal DEQ's case decision under the Administrative Process Act. This provision seeks to do that. Persons, for instance, who chat with the owner's representative out in the hall at the public meeting have not met the requirement.</p>
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<p>100</p>	<p>Change of ownership, project modifications, termination.</p> <p>Change of ownership. A permit by rule may be transferred to a new owner or operator if:</p> <ol style="list-style-type: none"> <li>1. The current owner or operator notifies the department at least 30 days in advance of the transfer date by submittal of a notice per subdivision 2 of this subsection;</li> <li>2. The notice shall include a written agreement between the existing and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability between them; and</li> <li>3. The transfer of the permit by rule to the new owner or operator shall be effective on the date specified in the agreement described in subdivision 2 of this subsection.</li> </ol> <p>B. Project modifications. Provided project modifications are in accordance with the requirements of this permit by rule and do not increase the rated capacity of the small solar energy project, the owner or operator of a project authorized under a permit by rule may modify its design or operation or both by furnishing to the department new certificates prepared by a professional engineer, new documentation required under 9VAC15-60-30, and the appropriate fee in accordance with 9VAC15-60-110. The department shall review the received modification submittal in accordance with the provisions of subsection B of 9VAC15-60-30.</p> <p>C. Permit by rule termination. The department may terminate the permit by rule whenever the department finds that:</p> <ol style="list-style-type: none"> <li>1. The applicant has knowingly</li> </ol>	<p>This section establishes requirements for permit by rule revisions such as change of ownership, modifications and permit terminations. The provisions of subsection C.3 are required by the Administrative Process Act when DEQ terminates a permit.</p>
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	<p>or willfully misrepresented or failed to disclose a material fact in any report or certification required under this chapter; or</p> <p>2. After the department has taken enforcement actions pursuant to 9VAC15-60-140, the owner or operator persistently operates the project in significant violation of the project's mitigation plan.</p> <p>Prior to terminating a permit by rule pursuant to subdivision 1 or 2 of this subsection, the department shall hold an informal fact-finding proceeding pursuant to § 2.2-4019 of the Virginia Administrative Process Act in order to assess whether to continue with termination of the permit by rule or to issue any other appropriate order. If the department determines that it should continue with the termination of the permit by rule, the department shall hold a formal hearing pursuant to § 2.2-4020 of the Virginia Administrative Process Act. Notice of the formal hearing shall be delivered to the owner or operator. Any owner or operator whose permit by rule is terminated by the department shall cease operating his small solar energy project.</p>	
<p>110</p>	<p>Fees for projects subject to Part II of this chapter.</p> <p>A. Purpose. The purpose of this section is to establish schedules and procedures pertaining to the payment and collection of fees from any applicant seeking a new permit by rule or a modification to an existing permit by rule for a small solar energy project subject to Part II (9VAC15-60-30 et seq.) of this chapter.</p> <p>B. Permit fee payment and deposit. Fees for permit by rule applications or modifications shall be paid by the</p>	<p>The RAP asked DEQ to develop appropriate fee schedules in compliance with the 2009 statute and in keeping with the anticipated actual costs the agency will incur in administering the permit program. The provisions are DEQ's best calculation of what the fees need to be. The procedures for payment are those used in other DEQ regulations.</p>

	<p>applicant as follows:</p> <ol style="list-style-type: none"> <li>1. Due date. All permit application fees or modification fees are due on submittal day of the application or modification package.</li> <li>2. Method of payment. Fees shall be paid by check, draft, or postal money order made payable to "Treasurer of Virginia/DEQ" and shall be sent to the Department of Environmental Quality, Receipts Control, P.O. Box 10150, Richmond, VA 23240.</li> <li>3. Incomplete payments. All incomplete payments shall be deemed nonpayments.</li> <li>4. Late payment. No application or modification submittal will be deemed complete until the department receives proper payment.</li> </ol> <p>C. Fee schedules. Each application for a permit by rule and each application for a modification of a permit by rule is a separate action and shall be assessed a separate fee. The amount of the permit application fee is based on the costs associated with the permitting program required by this chapter. The fee schedules are shown in the following table:</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Type of Action</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="2">Permit by rule application – by rated capacity:</td> </tr> <tr> <td>&gt;5 MW to 25 MW</td> <td style="text-align: right;">\$8,000</td> </tr> <tr> <td>&gt;25 MW to 50 MW</td> <td style="text-align: right;">\$10,000</td> </tr> <tr> <td>&gt;50 MW to 75 MW</td> <td style="text-align: right;">\$12,000</td> </tr> <tr> <td>&gt;75 MW to 100 MW</td> <td style="text-align: right;">\$14,000</td> </tr> <tr> <td colspan="2">Permit by rule modification – for any project subject to Part II of this chapter</td> </tr> <tr> <td></td> <td style="text-align: right;">\$4000</td> </tr> </tbody> </table> <p>D. Use of fees. Fees are assessed for the purpose of defraying the</p>	Type of Action		Permit by rule application – by rated capacity:		>5 MW to 25 MW	\$8,000	>25 MW to 50 MW	\$10,000	>50 MW to 75 MW	\$12,000	>75 MW to 100 MW	\$14,000	Permit by rule modification – for any project subject to Part II of this chapter			\$4000	<p>Included in the initial fee are DEQ's anticipated costs for processing the permit application and monitoring and enforcing the permit requirements. The application fee is tiered according to the rated capacity of the project, because the increasing land area expected to be occupied by the larger projects may involve a greater number of resource-protection issues. By contrast, there is only one fee for modification, since the major work concerning a particular project has probably been done at the time of the original application.</p> <p>The fee provisions are stated in a way to make clear that fees only apply to projects governed by Part II of the Solar PBR. No project governed by Part III (9VAC15-60-130 A or B) is required to pay a fee.</p>
Type of Action																		
Permit by rule application – by rated capacity:																		
>5 MW to 25 MW	\$8,000																	
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Permit by rule modification – for any project subject to Part II of this chapter																		
	\$4000																	

	<p>department's costs of administering and enforcing the provisions of this chapter including, but not limited to, permit by rule processing, permit by rule modification processing, and inspection and monitoring of small solar energy projects to ensure compliance with this chapter. Fees collected pursuant to this section shall be used for the administrative and enforcement purposes specified in this chapter and in § 10.1-1197.6 E of the Code of Virginia.</p> <p>E. Fund. The fees, received by the department in accordance with this chapter, shall be deposited in the Small Renewable Energy Project Fee Fund.</p> <p>F. Periodic review of fees. Beginning July 1, 2013, and periodically thereafter, the department shall review the schedule of fees established pursuant to this section to ensure that the total fees collected are sufficient to cover 100% of the department's direct costs associated with use of the fees.</p>	<p>F. This re-opener clause parallels the same provision in the Wind PBR, except that the date has been changed from 2012 to 2013. The Solar PBR is expected to become final approximately one year after the Wind PBR.</p>
<p>120</p>	<p>Internet accessible resources.</p> <p>A. This chapter refers to resources to be used by applicants in gathering information to be submitted to the department. These resources are available through the Internet; therefore, in order to assist applicants, the uniform resource locator or Internet address is provided for each of the references listed in this section.</p> <p>B. Internet available resources.</p> <p>1. The Virginia Landmarks Register, Virginia Department of Historic Resources, 2801 Kensington Avenue, Richmond,</p>	<p>Provided to assist applicants regarding resources required by the Solar PBR that are available through the internet.</p>

	<p>Virginia. Available at the following Internet address: <a href="http://www.dhr.virginia.gov/registers/register.htm">http://www.dhr.virginia.gov/registers/register.htm</a>.</p> <p>2. Professional Qualifications Standards, the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, as amended and annotated (48 FR 44716-740, September 29, 1983), National Parks Service, Washington, DC. Available at the following Internet address: <a href="http://www.nps.gov/history/local-law/arch_stnds_9.htm">http://www.nps.gov/history/local-law/arch_stnds_9.htm</a>.</p> <p>3. The Natural Communities of Virginia, Classification of Ecological Community Groups, <del>Second Approximation, Version 2.3,</del> Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA. Available at the following Internet address: <a href="http://www.dcr.virginia.gov/natural_heritage/ncintro.shtml">http://www.dcr.virginia.gov/natural_heritage/ncintro.shtml</a>.</p> <p>4. <u>Virginia</u> Comprehensive Wildlife Conservation Strategy, 2005-(referred to as the Virginia Wildlife Action Plan) , Virginia Department of Game and Inland Fisheries, 4010 West Broad Street, Richmond, Virginia. Available at the following Internet address: <a href="http://www.bewildvirginia.org/wildlifeplan/">http://www.bewildvirginia.org/wildlifeplan/</a></p> <p>C. Internet applications.</p> <p>1. Coastal GEMS application, 2010, Virginia Department of Environmental Quality. Available at the following Internet address: <a href="http://www.deq.virginia.gov/coastal/coastalgems.html">http://www.deq.virginia.gov/coastal/coastalgems.html</a>.</p> <p>NOTE: This website is maintained by the department. Assistance and information</p>	<p>3. &amp; 4. Technical corrections to citations.</p>
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		<p>may be obtained by contacting Virginia Coastal Zone Management Program, Virginia Department of Environmental Quality, 629 E. Main Street, Richmond, Virginia 23219, (804) 698-4000.</p> <p>2. Natural Landscape Assessment, 2010, Virginia Department of Conservation and Recreation. Available at the following Internet address: for detailed information on ecological cores go to <a href="http://www.dcr.virginia.gov/natural_heritage/vclnavnla.shtm">http://www.dcr.virginia.gov/natural_heritage/vclnavnla.shtm</a>. Land maps may be viewed at DCR's Land Conservation Data Explorer Geographic Information System website at <a href="http://www.vaconservedlands.org/gis.aspx">http://www.vaconservedlands.org/gis.aspx</a>.</p> <p>NOTE: The website is maintained by DCR. Actual shapefiles and metadata are available for free by contacting a DCR staff person at <a href="mailto:vaconslands@dcr.virginia.gov">vaconslands@dcr.virginia.gov</a> or DCR, Division of Natural Heritage, 217 Governor Street, Richmond, Virginia 23219, (804) 786-7951.</p> <p>3. Virginia Fish and Wildlife Information Service 2010, Virginia Department of Game and Inland Fisheries. Available at the following Internet address: <a href="http://www.vafwis.org/fwis/">http://www.vafwis.org/fwis/</a>.</p> <p>NOTE: This website is maintained by DGIF and is accessible to the public as "visitors," or to registered subscribers. Registration, however, is required for access to resource- or species-specific locational data and records. Assistance and information may be obtained by contacting</p>	
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	<p>DGIF, Fish and Wildlife Information Service, 4010 West Broad Street, Richmond, Virginia 23230, (804) 367-6913.</p>	
<p>130</p>	<p>Provisions for Projects Less Than or Equal to Five Megawatts or Less Than or Equal to 10 Acres or Meeting Certain Categorical Criteria</p> <p>A. The owner or operator of a small solar energy project is not required to submit any notification or certification to the department if he meets at least one (1) of the following criteria:</p> <p>1. The small solar energy project has either a rated capacity equal to or less than 500 kilowatts, or a disturbance zone equal to or less than two (2) acres; or</p> <p>2. The small solar project falls within at least one (1) of the following categories, without regard to the rated capacity or the disturbance zone of the project:</p> <p>a. The small solar energy project is mounted on a single-family or duplex private residence.</p> <p>b. The small solar energy project is mounted on one or more building(s) less than 50 years old <u>or, if 50 years of</u></p>	<p>This section sets forth the requirements for projects with “de minimis” impacts on natural resources, as recommended by unanimous consensus of the Solar RAP. The rationale for these provisions is explained in the “Alternatives” section of this submission.</p> <p>A. Projects that fall within subsection A do not have to provide notification or certification to the department. The RAP agreed that these projects have so little impact on resources that they do not warrant any kind of scrutiny by the department. A project qualifies for subsection A if it meets any one of the criteria listed in the subsection.</p> <p>1. The Solar RAP wanted to reference both rated capacity and disturbance zone. After lengthy discussion, the RAP agreed that the criterion should be <i>either</i> a rated capacity of 500 kW or less <i>or</i> a disturbance of 2 acres or less. This recommendation brings the Solar PBR “de minimis” criterion in step with the Wind PBR provision for projects that have no notification or certification requirements (for wind projects, the criterion is 500 kW or less).</p> <p>2. The Solar RAP also recommended that projects that meet any one of the criteria listed under subpart 2 should have no notification or certification requirements. Although these projects may well be of a small rated capacity and/or disturbance zone, the RAP recommended these categories without regard to any size criterion.</p> <p>As discussed above, the additions to b.,</p>

	<p><u>age or older, have been evaluated and determined by DHR within the preceding seven (7) years to be not VLR-eligible.</u></p> <p>c. The small solar energy project is mounted over one or more existing parking lots, <u>existing roads, or other previously disturbed areas and any impacts to undisturbed areas do not exceed an additional two (2) acres.</u></p> <p>d. The small solar energy project utilizes integrated PV only, provided that the building or structure on which the integrated PV materials are used is less than 50 years old. <u>or, if 50 years of age or older, have been evaluated and determined by DHR within the preceding seven (7) years to be not VLR-eligible.</u></p> <p>B The owner or operator of a small solar energy project with either a rated capacity greater than 500 kilowatts and less than or equal to five (5) megawatts, or a disturbance zone greater than two (2) acres and less than or equal to 10 acres, shall notify the department <del>by submitting and submit</del> a certification by the governing body of the locality or localities wherein the project will be located that the project complies with all applicable land use ordinances. <del>In addition, the owner or operator of such small solar energy project shall certify in writing to the department that he has (i) performed a desktop survey of known VLR-listed and VLR-eligible historic resources within the project's disturbance zone and within one half (1/2) mile of the disturbance zone boundary by means of an archives search of DHR's cultural resource inventory; (ii) performed a desktop survey of T&amp;E species within the project's disturbance zone by obtaining a wildlife report and map generated</del></p>	<p>c., and d. reflect consensus recommendations by the Combustion RAP concerning analogous provisions. DHR and DGIF staff members agree that these additions are appropriate for the Solar PBR regulation, and public comment supports making these provisions consistent with the proposed Combustion PBR provisions.</p> <p>B. The Solar RAP recommended that this "de minimis" category reference both rated capacity and disturbance zone. RAP members again recommended that the criteria be "either/or," and not both rated capacity and disturbance zone. The RAP's final recommendation of &gt;500 kW to 5 MW brings the Solar PBR's "de minimis" category in step with the Wind PBR's category. In both PBR's, the applicant is required to notify the department and provide certification by the local government that the project meets local land-use ordinances. The provision is being modified to clarify that notifying DEQ and providing local-government certification to DEQ are two separate obligations. The Solar RAP originally recommended an additional requirement for this category of desktop studies of known historic resources and of T&amp;E species. Based on public comment, however, this requirement is being removed from the regulation and will be moved to agency guidance. Based on comments from local-government representatives and</p>
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	<p><del>from DGIF's Virginia Fish and Wildlife Information Service web-based application (9VAC15-60-120 C 3) or from a data and mapping system including the most recent data available from DGIF's subscriber-based Wildlife Environmental Review Map Service; and (iii) reported in writing the results of the archives search of known historic resources and desktop survey of T&amp;E species to the governing body of the locality or localities wherein the project will be located.</del></p>	<p>others, it will be recommended in guidance that any problematic results of these surveys be discussed with appropriate staff at DGIF or DHR, and not reported to local government.</p>
<p>140</p>	<p>Enforcement.</p> <p>The department may enforce the provisions of this chapter and any permits by rule authorized under this chapter in accordance with §§ 10.1-1197.9, 10.1-1197.10, and 10.1-1197.11 of the Code of Virginia. In so doing, the department may:</p> <ol style="list-style-type: none"> <li>1. Issue directives in accordance with the law;</li> <li>2. Issue special orders in accordance with the law;</li> <li>3. Issue emergency special orders in accordance with the law;</li> <li>4. Seek injunction, mandamus or other appropriate remedy as authorized by the law;</li> <li>5. Seek civil penalties under the law; or</li> <li>6. Seek remedies under the law, or under other laws including the common law.</li> </ol> <p><del>Documents incorporated by reference.</del></p>	<p>Technical corrections. These citations now appear only in Section 120.</p>

	<p><del>The Natural Communities of Virginia, Classification of Ecological Community Groups, Second Approximation (Version 2.3), 2010, Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA.</del></p> <p><del>Virginia's Comprehensive Wildlife Conservation Strategy, 2005, Virginia Department of Game and Inland Fisheries, Richmond, Virginia.</del></p>	
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**Regulatory flexibility analysis**

*Please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.*

The permit by rule, in and of itself, is a regulatory method that is considered a less burdensome, faster approach for small businesses and indeed for all applicants.

Small businesses, and all other applicants, whose projects are 5 megawatts down to 500 kW will have only notification and minimal requirements to meet. Applicants with a project of 500 kW or less, or meeting other stated criteria, will have no PBR requirements.

Since there is no accurate way to predict what type or size of entity will apply for this permit by rule, it is difficult to analyze impacts on small businesses per se.

The RAP and DEQ have worked very hard to see that all requirements in the permit by rule are necessary and reasonable, within the mandates of the enabling legislation.

**Family impact**

*Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one’s spouse, and one’s children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.*

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The Department does not expect that the regulation will have a direct impact on the institution of the family and family stability.

### Acronyms and Definitions

*Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.*

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